

REMARKS

Claims 1-30 are pending in this application. Of these pending claims, Claims 1-30 stand rejected. By way of this paper, new Claims 31-34 have been added herein.

The foregoing amendments and following remarks are believed to be fully responsive to the outstanding office action, and are believed to place the application in condition for allowance.

Claim Rejections – 35 U.S.C. § 103

Claims 1-5 and 11-23 and 27-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Sievers et al. ('441) reference in view of the Coulter ('949) reference. Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Sievers et al. ('441) reference in view of the Coulter ('949) reference as applied to Claims 1-5, 11-23 and 27-30 above, and further in view of the Shrivastava et al. ('401) reference. Claims 8-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Sievers et al. ('441) reference in view of the Coulter ('949) reference, as applied to Claims 1-5, 11-23 and 27-30 above, and further in view of the Mychajlowskij et al. ('561) reference. Additionally, Claims 24-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Sievers et al. ('441) reference in view of the Coulter ('949) reference, as applied to Claims 1-5, 11-23 and 27-30 above, and further in view of the Temple et al. ('311) reference.

Independent Claims 1, 15, and 29 include the feature of a thermodynamically stable mixture of a fluid and a marking material, as described in Applicants' specification as originally filed, specifically, on at least page 12, lines 19-29. Applicants respectfully submit that the prior art cited above does not disclose this feature.

In this regard, Applicants submit that the Sievers et al. ('441) reference discloses an apparatus and method of particle formation in which an immiscible mixture of a supercritical fluid (created by reservoir 10 and pump 12) and an aqueous solution (14) containing a dissolved or suspended substance(col. 11, lines 44-64) forms an aerosol (34) comprising fine particles of a substance dissolved or suspended in an aqueous solution (Figure 1, col. 12, lines 5, 6, and 30-33). The immiscible mixture of the supercritical fluid and the aqueous solution need not be

stable (col. 4, lines 27-29) because the substance is already in an aqueous solution (col. 10, lines 4-7). In contrast, the mixture of the fluid and the marking material of Applicants' invention should be thermodynamically stable in order to prevent the marking material from unintentionally precipitating (page 12, lines 23-25) and/or aggregating (page 13, lines 9-11). Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103 rejection of Claims 1, 15, and 29 is respectfully requested.

The remainder of the claims being dependent from one of Claims 1, 15, or 29 are considered patentable for at least the same reasons.

New Claims

New Claims 31-34, depending from independent Claims 29, 1, and 15, respectively, are presented herein. Claims 31-34 include the feature of the marking material (a first marking material in Claim 32 and a second marking material in Claim 33) being solvent free when the fluid is in the gaseous state at the location beyond the outlet of the discharge device. Support for this feature can be found in the specification and drawings as originally filed, and specifically on at least page 14, lines 6-11; page 16, lines 8-11; and page 17, lines 4-7. Applicants submit that this feature is not disclosed by the Sievers et al. ('441) reference.

In this respect, Applicants submit that the Sievers et al. ('441) reference discloses an apparatus and method of particle formation in which an immiscible mixture of a supercritical fluid (created by reservoir 10 and pump 12) and an aqueous solution (14) containing a dissolved or suspended substance (col. 11, lines 44-64) forms an aerosol (34) comprising fine particles of a substance dissolved or suspended in an aqueous solution (Figure 1, col. 12, lines 5, 6, and 30-33). As the substance is still dissolved or suspended in the aqueous solution after the aerosol is formed, the substance can not be said to be solvent free.

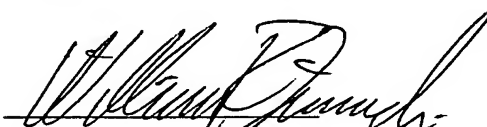
Additionally, the Sievers et al. ('441) reference discloses that the particles of the dissolved substance and the aqueous solution are collected and further treated or diluted with air (col. 12, lines 4-8), nitrogen, or other gases as an aid to drying the aerosol (col. 10, lines 8-10). As the aerosol particles need to be further treated or dried after the aerosol is formed, the substance can not be said to be solvent free. Accordingly, allowance of Claims 31-34 is requested.

CONCLUSION

It is respectfully submitted that, in view of the above amendments and remarks, this application, with currently pending claims 1-34, is now in condition for allowance, prompt notice of which is earnestly solicited.

The Examiner is invited to call the undersigned in the event that a phone interview will expedite prosecution of this application towards allowance.

Respectfully submitted,



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